

**The Effect Of Giving Health Education About Free Sex Using The method Brain Mapping On Changes In The Level Of Knowledge Of Class VIII Students  
(At Bandung Tulungagung 1 Junior High School 2017/2018 academic year)**

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**ABSTRACT**

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**Keywords:**

Sex Education,  
Brain Mapping,  
Knowledge.

*Adolescents are the next generation of the nation, in Indonesia Adolescents have a considerable proportion. But juvenile delinquency is increasingly worrying, among others, free sex. This is because not yet the maximum sex education provided to adolescents, including information media. In health education the media has an important influence in delivering information. Mind Mapping was chosen as a medium in delivering sex education information. This study aims to determine the effect of giving sex education with media mind mapping to knowledge Research was conducted at SMPN 1 Bandung Tulungagung on February 4 - 12, 2018 to 50 respondents. Design Experimental with pre test - post test design. The population of all class VIII students with simple random sampling technique was in accordance with the inclusion criteria. The results showed that before being given sex education as many as 21 respondents had good grades. after being given sex education brain mapping 33 respondents had good grades. The Wilcoxon Test Sign Rank Test results show a value of  $p < 0,000$  ( $p < \alpha$ ) which means  $H_0$  is rejected. Brain mapping is more attractive to the brain because of the use of images, colors and keywords. It is recommended for further researchers to further examine the use of educational aids media*

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**A. INTRODUCTION**

Many people say that adolescence is the most beautiful times. The search for one's identity occurs in adolescence. Teenagers are the backbone of a country and adolescents are the next generation of the nation that are expected to replace previous generations with better quality. The number of teenagers throughout Indonesia is recorded more than 70 million people or 13 times the total population of Singapore or around 23% of the total population, (Deputy Family Welfare and Family Empowerment (KSPK) BKKBN RI, Sudibyo Alimoeso), Indonesia has many seedlings HR to be able to bring Indonesia forward in the future. But seeing the current condition of adolescents, the hopes of adolescents as the nation's successors that determine the quality of the country in the future seem to contradict the reality. Naughty and deviant behavior among teenagers today tends to be worrying. Many teenagers have fallen into life that can damage the future.

Among various kinds of juvenile delinquency, free sex is one of them, according to Desmita (2005) free sex is any way of expressing and releasing sexual urges that come from the maturity of sexual organs, such as intimate dating, flirting, sexual intercourse, but the behavior is assessed not in accordance with the norm because teenagers do not have sexual experience.

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A survey conducted by BKKBN in late 2008 stated that 63% of teenagers in several major cities in Indonesia had premarital sex. And, the early sex offenders believe, having sexual intercourse once does not cause pregnancy. Other sources from the University of Indonesia and research *Australian National University* in 2010 said that as many as 20.9% of young women in Indonesia had become pregnant out of wedlock due to sex and 38.7% had experienced early marriage (BKKBN, 2010).

Based on the preliminary study at Campurdarat SMP 2, from the head of the curriculum section said that sex education and drugs have been given but only with conventional methods. While 10 respondents interviewed 8 out of 10 respondents said they did not know about the dangers of free sex and sexually transmitted diseases, and 2 out of 10 respondents admitted that he had never done *kissing/kissing*.

Adolescents who engage in free sex will face many problems in their lives, ranging from social problems, pregnancy, sexual violence and do not demand the possibility of teenagers who are pregnant going to have an abortion.

One of the causes of free sex is a lack of knowledge about sex among teenagers. At the age of middle adolescence that is between the ages of 14-16 years the curiosity of sex activity is very high, besides that teenagers at this age already have a deep curiosity and begin fantasizing about sexual activity, so in this case sex education is very important to instill knowledge in adolescents to avoid free sex. Sex education is needed to bridge the adolescent's curiosity about sexuality in a true, honest, complete manner, which is adjusted to its age maturity. Sex education actually means sexuality education, which is an education about sexuality in a broad sense (Pangkahila, 2008). Through teen sex education, it is expected to be able to place sex in the right and proper portion and not be too excessive in perceiving the meaning of sex and try to change negative perceptions about sex. The low understanding of sex education is due to the many misconceptions regarding sex education. Therefore sex education for teenagers is very necessary.

To develop adolescent's understanding of sex education, one of them is by using media *Mind Mapping*. Tony Buzan in his book "*Smart Mind Mind Mapp*", Method *Mind Mapping* is a way of recording that is creative, effective and will literally map thoughts (Buzan, T. 2009).

With *Mind Mapping*, someone will learn more easily and all the information he receives will be more concise, and make the connection between one information and other information more clearly.

Based on the description above, the researcher is interested in conducting research with the title "The Effect of Giving Sex Education with Media *Mind Mapping* on Knowledge of Adolescent Development and Human Reproduction in Class VIII Middle School Students"

## A. RESEARCH METHOD

design used in this study was *experimental* using the method *pre test- post test*. This design seeks to reveal a causal relationship by involving one group of subjects. The group of subjects was observed before treatment, then observed again after treatment. The cause and effect testing is done by comparing the results of the *pre test* with the *post test*. But still without comparing with the effect of the treatment imposed on other groups (Nursalam, 2008).

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The population of this study is the eighth grade students of Bandung Tulungagung 1 Junior High School 1/2014 Academic Year. The sampling technique used was *simple random sampling* with a sample size of 50 respondents. The instrument in this study was to use a questionnaire with a total of 20 questions.

Data analysis uses the *Wilcoxon Signed Rank Test* which will show whether or not there is an influence on the provision of sex education with media *mind mapping* on adolescent knowledge about adolescent development and human reproduction.

The test *Wilcoxon* is used to test the significance of the comparative hypothesis of two correlated samples if the data is in the form of ordinal

$$T - [n(n+1)/4]$$

$$Z = \frac{\text{---}}{\sqrt{\frac{n(n+1)(2n+1)}{24}}}$$

Remarks:

Z = Wilcoxon test results = the

T lowest total level (difference) between the value *pre* and the *post test*

n = number of samples

## B. RESEARCH RESULTS

From the results of the study before being given sex education it is known that as many as 21 respondents had good grades.

**Table 1.** Frequency Distribution Respondents' knowledge of adolescent development and human reproduction before being given sex education with media *mind Mapping of*

Knowledge	F	%
Good	21	48
Enough	19	32
Less	10	20
Total	50	100

The results of the study after being given sex education revealed that 33 respondents had good grades.

**Table 2.** Frequency Distribution Respondents' compliance after being given health education in Bandung Tulungagung Health Center in 2018

<i>Knowledge</i>	<i>F</i>	<i>%</i>
Good	33	60
Enough	15	30
Less	2	4
Total	50	100

The results of research before and after giving sex education were obtained from 21 respondents having good knowledge to 33 respondents, while of the 10 respondents who had less scores to be 2 respondents.

**Table 3.** Analysis of *Pre* and *Post*

<i>Knowledge of Knowledge Respondents'</i>	<i>Before</i>		<i>After</i>	
	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>
<b>Good</b>	221	442	333	666
<b>Enough</b>	119	338		330
<b>Less</b>	110	220	22	44
<i>p = 0.00 α = 0.05</i>				

The results of the statistical analysis *Wilcoxon Sing Rank Test*,  $p = 0,000$ , where  $p < 0.05$ . So that  $H_0$  is rejected which means that there is an effect of giving sex education with media mind mapping to knowledge about adolescent development and human reproduction in class VIII Bandung 1 Junior High School 1 Tulungagung Regency 2017/20208 academic year.

### C. DISCUSSION

Based on the results of research in table 4.1 respondents' knowledge before being given sex education most have good knowledge as many as 21 respondents or 42%.

According to Nursalam (2003) knowledge is influenced by several factors, one of them is age or age. According to Elizabeth, BH (1995) in Mubarak (2005) age is an individual who starts from the moment of birth until the birthday. The more age, the level of maturity and strength of a person will be more mature in thinking and working. Whereas according to Hurlock (1998) in Nursalam (2001) the more the age, the level of maturity and strength of a person will be more mature in thinking and working.

Based on the results of the study, respondents aged 14 years as many as 13 respondents had good grades, meanwhile from 7 respondents aged 15 years, 6 respondents had good knowledge and only 1 respondent had less value. Hi, this is the opposite of theory and research results where there is no influence between age and the level of knowledge of the respondents. This is because the research respondents are still in the same age group, middle teens. In addition, the information obtained by respondents about sex education is still small, besides that not all respondents have received information on previous sex education whether explained by health workers or electronic media. Even though sex education has been made into an education program by Guidance and Counseling (BK) but sex education has not been used as a formal subject and the scope of education provided by Guidance and Counseling (BK) is only about free sex besides sex education is only given once at the time of activity school orientation period (MOS). So that most respondents have sufficient average grades.

Besides age, knowledge is also influenced by information. Information is an important function to help reduce anxiety. Someone who can get information will increase the level of knowledge of something (Nursalam, 2004). Based on the results of research and theory there is a match between theory and results. Where respondents who had previously received sex education in as many as 17 respondents or 34% had good grades, but there were still students who had less or enough grades. This is because not all students have received sex education other than that even though they have been taught by Guidance and counseling (BK) but in the learning process still use conventional methods where the teacher only explains it without using any media and students record what is explained by the teacher, so not all students can understand what is conveyed by the teacher.

Based on the results of the study in table 4.2 the knowledge of respondents after being given sex education most of them have good knowledge as many as 33 respondents or 66%.

In Notoatmodjo (2003) stated that the knowledge in *cognitive domain* one of them is to know (*know*) that is interpreted as considering a previously learned material. What is included here is being able to mention, describe, define, and state.

From the results of existing research and theories, there are known influences. By providing sex education with media *mind mapping* can increase the knowledge of respondents from the information provided. So that the information obtained about sex education can increase respondents' knowledge, namely as many as 33 respondents have good grades. This is because all respondents were given the same treatment by researchers that is given sex education, besides that sex education provided by researchers is more interesting because researchers also use media namely *mind mapping* which makes it easier for students to absorb information because they use shorter words, colors, and images so that the brain is more

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interested and will be easy to memorize or remember a material. In addition, information provided by students can be said to be appropriate and not deviate from aspects of sexuality.

Based on the results of the research in table 4.3, the respondents' knowledge before and after being given sex education with *mind mapping*, there was an increase in knowledge as many as 21 respondents had good knowledge to 33 respondents, while from 10 respondents who had less scores became 2 respondents.

The results of the statistical analysis *Wilcoxon Sing Rank Test*,  $p = 0,000$ , where  $p < 0.05$ . So that  $H_0$  is rejected which means that there is an influence of giving sex education with media *mind mapping* to knowledge in class VIII Bandung 1 Junior High School 1 Tulungagung District 2017 Academic Year

In Notoatmodjo (2007) that one strategy to increase knowledge is by providing information that can be done with counseling.

Based on the results of research and theory, there is an influence of Knowledge before being given sex education with media *mind mapping* and after being given sex education with media *mind mapping*. In this case sex education information is provided by researchers with the help of media *mind mapping* as an object of sensing, this is one of the factors that greatly influences the acceptance of new knowledge. This proves that with the information obtained through the provision of counseling in the form of sex education that is quite clear, communicative, and using interesting media, one of them is *mind mapping* that is very acceptable and understood by respondents so that respondents who previously had sufficient knowledge or not were then given counseling in the form of sex education can increase the knowledge of respondents to be good about knowledge about sex education and sexuality which means that by providing counseling in the form of sex education there is an influence on the knowledge of respondents.

This is in line with Fadilah Aini's research from the University of North Sumatra with the title Effect of providing health education with media *Booklet* on students' knowledge and attitudes about reproductive health in Islamic boarding schools from the city of Medan in 2011 where there was a difference in knowledge with  $p = 0.002$  It can be concluded that the provision of health education and using media is one of them, *mind mapping* has an effect on knowledge.

#### D. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the study Specifically, it can be concluded that:

1. Knowledge of class VIII students of SMPN 1 Bandung in the academic year 2017/2018 concerning Adolescent Development and Human Reproduction before being given counseling in the form of sex education had 21 respondents or 42% good knowledge.
2. Knowledge of eighth grade students of SMPN 1 Bandung in the 2017/2018 academic year about Adolescent Development and Human Reproduction after being given counseling in the form of sex education having good knowledge of 33 respondents or 66%.
3. There is an effect of giving sex education with media *mind mapping* to knowledge about Adolescent Development and Human Reproduction in class VIII Bandung 1 SMPN 1 2017/2017 academic year where the value of  $p = 0.00$  with  $\alpha = 0.05$ .

While for the advice of this study is

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## 1. for Program Development

## a. for Middle School Education Institutions

Sex education programs should be used as formal learning eyes, and can be included in core lessons such as biology.

## 2. For the Development of ScienceScience

## a. for NursingIt

should be necessary to apply knowledge about sex education and apply the knowledge learned during the lecture by providing health education through various interesting media such as mind mapping at every opportunity.

## b. For Further Researchers It

should be necessary to further examine the use of other media in providing health counseling so that later the results of these studies can be compared with this study whether using other media besides *mind mapping* is more effective or not.

## REFERENCES

- Aini, Fadilah. 2011. *The effect of providing health education with Booklet media on the knowledge and attitudes of santri about reproductive health in Islamic boarding schools from the hikmah of Medan city in 2011*. Thesis: Unsu
- Arikunto, Suharmisi. 2006. *Research Procedure A Practice Approach*. Jakarta: PT Rineka Cipta.
- BKKBN.2010. *Teenagers and Premarital Sex* [http / www.bkkbn.gi.id](http://www.bkkbn.gi.id). accessed on December 16, 2017
- Buzan, Tony.2007.*Smart Mind Map Book for Children: So that Children Are Smart in School*. Jakarta: Gramedia
- Mubarak .2005.*Public Health Sciences: Theory and Application*. Jakarta: salemba Medika
- Notoatmojo, S.2003. *Health Promotion and Health Theory Theory*. Jakarta: Rineka Cipta
- Nursalam. 2003. *Concept and Application of Research Methodology in Nursing*. Jakarta Salemba Medika
- Pangkahila.2008.*Sex Education for Children Immediately Awarded*. (<http://sosbud.kompasiana.com/2011/04/17/aborsi-dan-pergaulan-bebas-remaja-yang-mengkwatirkan-355587.html>) Accessed on December 3, 2017.
- Setiadi. 2007. *Concept and Writing of Nursing Research First Edition*. Jakarta: Graha
- Soetjinigsih Science.2007.*Adolescent Growth and Problems*. Jakarta: Sagung Seto
- Sugiyono.2006. *Administrative Research Methods*. Bandung: Alfabeta
- Amzah
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